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EXAMINER

WU, JIANYE

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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11/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/645,255

Applicant(s)

ZHAO, FUYONG

Examiner

Jianye Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☒ Interview Summary (PTO-413) ✓
Paper No(s)/Mail Date 10-10-07
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 21-25** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant informed Examiner during interview on 10/10/07 that Section [0148] provides support to the newly added claims 21-25. However, Examiner could not find sufficient evidences in support these new claims in the section referred by Applicant, as well as in other places in the Specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-2, 4-5, and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Teruhi et al (US 20030072269, hereinafter **Teruhi**) in view of J. Moy et al. IETF RFC 1247 "OSPF Version 2" July 1991 (hereinafter **RFC 1247**) and Apostolopoulos, et al., INTF RFC 2676 "QoS Routing Mechanisms and OSPF Extensions", August 1999 (hereinafter **RFC 2676**)

For **claim 1**, Teruhi discloses a method comprising the computer-implemented steps of:

sending a first data packet (RTCP-SR, FIG. 10) from a sending router to a given destination via a particular router so that the packet arrives at the destination;

receiving a second data packet (RTCP-RR, FIG. 10) that indicates an second amount of time (74 of FIG. 4) from taken for the destination back to the sending router.

Teruhi **is silent on** the following:

selecting the path that the first packet is predicted to reach the destination in a shortest time (the first time);

updating the shortest time based on the second time (the trip time of the second packet from the destination to the sending router); and

updating the routing table based on information contained in the second data packet.

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Moy teaches shortest path (shortest-path, 3rd paragraph of Section 1.1, Page 2), RFC2676 further teaches the shortest path in term of traveling time (delay, line 8 of first paragraph in Section 1.2, Page 5).

Teruhi, RFC 1247, and RFC 2676 all teach the same art (routing). Furthermore, RFC 1247 is explicitly cited by Teruhi, and RFC 2676 is an extension of RFC 1247. One skilled in the art would have been motivated to combine them together to select the shortest (when measured in time) path for the first packet; and update the shortest (expectation) time with the second time and then update the routing table accordingly.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to choose the shortest path (in term of traveling time) and update the first (shortest) time and the routing table based on the information from the second packet for the benefit of efficiency of network.

As to **claim 2**, Teruhi, RFC 1247, and RFC 2676 in combination disclose the method of Claim 1, further comprising: updating a path associated with both the destination and the particular router (by considering the particular router as the sending router in claim 1).

As to **claim 4**, Teruhi, RFC 1247, and RFC 2676 in combination disclose the method of Claim 1, whether a path taken by the first data packet is feasible (based on updated routing table).

As to **claim 5**, Teruhi, RFC 1247, and RFC 2676 in combination disclose the method of Claim 1, further comprising: updating, based on information contained in the second data packet, a list of routers that indicates all routers in a

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path taken by the first data packet to a router that sent the first data packet to a present router (This is equivalent to applying claim 1 to each outer of the list, therefore is rejected for the same reason as explained in claim 4 above).

As to **claim 7**, it is rejected for the same reason explained in claim 4 above.

5. **Claims 3 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Teruhi in view of RFC 2676.

As to **claim 3**, Teruhi discloses the method of Claim 1.

Teruhi is **silent on** the second data packet information including the bandwidth available on a path taken by the second data packet.

RFC 2676 teaches the routing packet containing QoS information (Line 3 of Page 5), particularly bandwidth information (Line 7 of Section 1.2, Page 5).

One skilled in the art would have been motivated to apply the teaching by RFC 2676 to the second packet to provide additional information for better routing options. Furthermore, OSPF technology taught by 2676 is cited by the applicant in the disclosure.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include bandwidth information in the second packet for the benefit of efficiency of providing better routing options.

As to **claim 6**, it is rejected for the same reason explained in claim 3 above.

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6. **Claims 8 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over J. Moy "OSPF Version 2", July 1991 (hereinafter RFC 1247) in view of RFC 2676.

For **claim 8**, RFC 1247 disclose a method of updating a routing table, comprising steps of:

for each neighbor router in a set of neighbor routers (neighboring routers, page 4), selecting a shortest path to a specified destination via a set of neighbor routers;

send a first data packet to the specified destination;

receiving a second data packet from the specified destination;

updating the routing table based on information contained in the second data packet.

Moy **is silent on** the measurement parameter in routing table is the time (or delay) for a packet to travel from a source router to a destination router.

RFC 2676 discloses using delay (line 8 of Section 1.2, Page 5) as one of QoS parameters for routing measurement, which are used to the updating routing table. RFC 2676 teaches enhancement of OSPFv2 by Moy. It would be obvious for one skilled in the art to combine Moy with RFC 2676 to use time delay in the routing table, and update the routing table for the shortest path in term of delay time between two routers.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to using delay time as routing measurement parameters to update routing table.

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As to **claim 18**, it is a computer-readable medium claim of the claim 8, therefore, is rejected for the same reason explained in claim 8 above.

As to **claim 19**, it is a means for claim of the claim 8, therefore, is rejected for the same reason explained in claim 8 above.

As to **claim 20**, it is an apparatus claim of the claim 8, therefore, is rejected for the same reason explained in claim 8 above.

7. **Claim 1-25** are rejected under 35 U.S.C. 103(a) as being 103(a) as being unpatentable over Gianni Di Caro et al., "AntNet: Distributed Stigmergetic Control for Communications Networks", Journal of Artificial Intelligence Research, 12/98 (hereinafter Caro) in view of RFC 2676 (which includes recited RFC 1247).

For **claim 1**, Teruhi discloses a method comprising the computer-implemented steps of:

sending a first data packet from a sending router to a given destination via a particular router so that the packet arrives at the destination (forward ant, step 1 of page 326, line 1-3);

receiving a second data packet that indicates an second amount of time from taken for the destination back to the sending router (backward ant, step 5 of page 327).

selecting the path according to a criterion that the first packet (forward ant packet) is predicted to reach the destination (the trip time that the forward ant packet travel from source node to destination node, step 2 of page 326);

updating the shortest time based on the second time (the trip time of the backward ant packet, step 5 of page 328); and

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updating the routing table based on information contained in the second data packet (step 7, page 328-329).

Teruhi **is silent on** the criterion is that the first packet is predicted to reach the destination in a shortest time (the first time);

In the same field of endeavor, RFC2676 further teaches routing the shortest path in term of traveling time (delay, line 8 of first paragraph in Section 1.2, Page 5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to choose the shortest path (in term of traveling time) and update the first (shortest) time and the routing table based on the information from the second packet for the benefit of efficiency of network.

As to **claim 2**, Caro and RFC 2676 disclose the method of Claim 1, Caro further discloses the method comprising: updating a path associated with both the destination and the particular router ("updates the two main data structures of node", line 1-2 of step 7, page 328).

As to **claim 3**, Caro and RFC 2676 disclose the method of Claim 1, but are silent on the second data packet information including the bandwidth available on a path taken by the second data packet.

RFC 2676 teaches the routing packet containing QoS information (Line 3 of Page 5), particularly bandwidth information (Line 7 of Section 1.2, Page 5).

One skilled in the art would have been motivated to apply the teaching by RFC 2676 to the second packet to provide additional information for better

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routing options. Furthermore, OSPF technology taught by 2676 is cited by the applicant in the disclosure.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include bandwidth information in the second packet for the benefit of efficiency of providing better routing options.

As to **claim 4**, Caro and RFC 2676 disclose the method of Claim 1, whether a path taken by the first data packet is feasible (a path predicted to take a shortest time from the source node to the destination node is always feasible).

As to **claim 5**, Caro and RFC 2676 disclose the method of Claim 1, Caro further discloses the method comprising: updating, based on information contained in the second data packet, a list of routers that indicates all routers in a path taken by the first data packet to a router that sent the first data packet to a present router (step 5 of page 327 and “updates the two main data structures of node”, line 1-2 of step 7, page 328).

As to **claim 6**, it is rejected for the same reason explained in claim 3 above.

As to **claim 7**, it is rejected for the same reason explained in claim 4 above.

For **claim 8**, Caro discloses a method of updating a routing table (steps 1-7, page 326-330), comprising steps of:

for each neighbor router in a set of neighbor routers (“every network node”, line 1 of step 1, page 326), selecting a path to a specified destination via a set of neighbor routers (line 1-2 of step 3 and step 5, page 327);

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send a first data packet to the specified destination ("destination node is reached", step 5, page 327);

receiving a second data packet from the specified destination (step 6, page 328);

updating the routing table based on information contained in the second data packet (step 7, page 328).

Caro **is silent** on the path is the shortest in terms of delay time from a source router to a destination router.

In the same field of endeavor, RFC 2676 discloses OSPF extensions on routing based on path QoS parameters (lines 1-5 of page 3). Since time delay (trip time) is one of most important QoS parameters, it would have been obvious to one skilled in the art to use the shortest trip time (delay time) as the criteria for the shortest path.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Caro with RFC 2676 to selecting a particular neighbor router that has a lowest amount of delay time from source node to the destination node in searching the best routing.

For **claim 9**, Caro discloses a method of updating a routing table (Node routing table, page 331, line 6), the method comprising the computer-implemented steps of:

for each neighbor router in a set of neighbor routers ("every network node", line 1 of step 1, page 326), associating the neighbor router with an amount of time ("elapsed_time", page 331, line 19; or step 2 of page 326),

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predicted to be required for a data packet to travel to a specified destination if the data packet is transmitted through the neighbor router (elapsed_time, page 331, line 19; or step 2 of page 326);

receiving a forward ant data packet (LanuchForwardAnt, line 13 of page 331) that indicates the specified destination (page 331, line 14-20; or step 2 of page 326); selecting, based on one or more first specified criteria (goodness, first paragraph of Section 4.2, page 330; or step 3 of page 327), a subset of the set of neighbor routers (from page 331, line 14-20 where forward ant can only be passed to neighboring routers one at a time);

in response to receiving the forward ant data packet, relative to the specified destination, among amounts of time associated with neighbor routers in the subset of neighbor routers (first paragraph of Section 4.2, page 330);

sending the forward ant data packet to the particular neighbor router (lines 14-20, page 331);

receiving a backward ant data packet that indicates a second amount of time taken for the forward ant data packet to travel to the specified destination (lines 14-20, page 331);

determining, based on information indicated in the backward ant data packet, whether one or more second specified criteria are satisfied (line 5-30 of page 331, determining is based on M=Local traffic model and T=Node routing table); and

if the one or more second specified criteria are satisfied, then performing steps comprising:

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updating the first amount of time based on the second amount of time (UpdateLocalTrafficModel, line 24 of Page 331); and

if one or more third specified criteria are satisfied, then updating, based on information indicated in the backward ant data packet, the routing table (UpdateLocalRoutingTable, line 26 of Page 331).

Caro does not explicitly disclose selecting a particular neighbor router that is associated with a first amount of time that is a lowest amount of time, but defines a goodness in terms of trip time ("as estimated using the associated trip time", line 27-34 of page 329) that is used as a measure for determining routing between nodes.

In the same field of endeavor, RFC 2676 discloses OSPF extensions on routing based on path QoS parameters (lines 1-5 of page 3). Since time delay is one of most important QoS parameters, it would have been obvious to one skilled in the art to use the shortest trip time (delay time) as the criteria for the shortest path.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Caro with RFC 2676 to selecting a particular neighbor router that has a lowest amount of delay time from source node to the destination node in searching the best routing.

As to **claim 10**, Caro and RFC 2676 disclose the method of Claim 9, wherein the one or more first specified criteria comprise a criterion that no neighbor router in the subset of neighbor routers is contained in a list of routers

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that have already been visited by the forward ant data packet ("choosing among the neighbors it did not already visit", line 1-2 of page 327).

As to **claim 11**, Caro and RFC 2676 disclose the method of Claim 9, Caro further discloses the method comprising:

determining whether any neighbor router in the set of neighbor routers is associated with an amount of time that is lower than the first amount of time ("as estimated using the associated trip time", line 27-34 of page 329); and

if any neighbor router in the set of neighbor routers is associated with an amount of time that is lower than the first amount of time, then updating the forward ant data packet to indicate a present router in a loop-avoidance router field of the forward ant data packet (step 4 of page 327, line 1-3).

As to **claim 12**, Caro and RFC 2676 disclose the method of Claim 11, Caro further discloses wherein a loop-avoidance router field ("memory of their paths and of the traffic conditions found", lines 1-2 of step 2 in page 326; notice that a backward ant packet has the same structure as forward ant packet) of the backward ant data packet indicates a router indicated by the loop-avoidance router field of the forward ant data packet ("The backward ant takes the same path as that of its corresponding forward ant, but in the opposite direction", step 6 of page 328).

As to **claim 13**, Caro and RFC 2676 disclose the method of Claim 12, Caro further discloses wherein the one or more second specified criteria comprise a criterion ("trip time", line 10 of page 329) that the router indicated by the loop-avoidance router field of the backward ant data packet is not contained

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in a list of routers that the forward ant visited after visiting a present router (step 3 of page 327, line 1-2; notice that a backward ant packet has the same structure as forward ant packet).

As to **claim 14**, Caro and RFC 2676 disclose the method of Claim 9, but is silent on wherein the one or more specified criteria comprise a criterion that the second amount of time is lower than any other amount of time, relative to the specified destination, among amounts of time associated with neighbor routers in the set of neighbor routers.

However, the criterion that the second amount of time is lower than any other amount of time is used in OSPF (disclosed by RFC 2676) in determining the shortest path.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to specify criterion that the second amount of time is lower than any other amount of time in order to find the shortest path.

As to **claim 15**, Caro and RFC 2676 disclose the method of Claim 9, but are silent on the method comprising: determining whether a router from which the backward ant data packet was received matches a router associated with the destination in the routing table; and if the router from which the backward ant data packet was received does not match the router associated with the destination in the routing table, then updating a path feasibility flag of the backward ant to indicate that a path taken by the forward ant is not feasible.

However, the method requires the forward ant packet and the backward ant packet go through the same route (in opposite direction). If the backward ant

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packet cannot following the same route as the forward ant packet, the ant packet will be destroyed according to Caro (step 4 of page 327). It is a common practice in the art that one way of destroying a packet is to set a flag of the packet so that it can be destroyed at proper time or location.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to set a flag of the received backward ant packet if routing information of the packet does not match the routing table of the router in order to comply with the protocol.

As to **claim 16**, Caro and RFC 2676 disclose the method of Claim 15, but is silent on wherein the one or more third specified criteria comprise a criterion that the path feasibility flag of the backward ant indicates that the path taken by the forward ant is feasible.

However, the criterion that the second amount of time is lower than any other amount of time is used in OSPF (disclosed by RFC 2676) in determining the shortest path.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to specify criterion that the second amount of time is lower than any other amount of time in order to find the shortest path.

As to **claim 17**, Caro and RFC 2676 disclose the method of Claim 9, but is silent on wherein the one or more third specified criteria comprise a criterion that a path taken by the forward ant data packet from a present router to the specified destination does not include any routers that are identified in a potential upstream node list.

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However, the criterion that the second amount of time is lower than any other amount of time is used in OSPF (disclosed by RFC 2676) in determining the shortest path.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to specify criterion that the second amount of time is lower than any other amount of time in order to find the shortest path.

As to **claim 18**, it is a computer-readable medium claim of the claim 8, therefore, is rejected for the same reason explained in claim 8 above.

As to **claim 19**, it is a means for claim of the claim 8, therefore, is rejected for the same reason explained in claim 8 above.

As to **claim 20**, it is an apparatus claim of the claim 8, therefore, is rejected for the same reason explained in claim 8 above.

As to **claim 21**, Caro and RFC 2676 disclose the method of Claim 20, Caro further discloses wherein the stored sequences of instructions include instructions which, when executed by the processor, cause the processor to further carry out: updating, based on information contained in the second data packet, a path associated with both the destination and the particular router (step 6, page 328, the same path as that of its corresponding forward ant).

As to **claim 22**, Caro and RFC 2676 disclose the method of Claim 20, Caro further discloses wherein the stored sequences of instructions include instructions which, when executed by the processor, cause the processor to further carry out: updating, based on information contained in the second data packet, an indication of an amount of bandwidth available (characterized by a

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bandwidth, lines 10-11 of page 322) on the path taken by the second data packet (bandwidth is considered as a criterion of feasible path in algorithm specified in steps 1-7 of pages 326-330).

As to **claim 23**, Caro and RFC 2676 disclose the method of Claim 20, Caro further discloses wherein the stored sequences of instructions include instructions which, when executed by the processor, cause the processor to further carry out: updating, based on information contained in the second data packet, whether a path taken by the first data packet is feasible (steps 1-7 of pages 326-330, particularly step 6 of page 328).

As to **claim 24**, Caro and RFC 2676 disclose the method of Claim 20, Caro further discloses wherein the stored sequences of instructions include instructions which, when executed by the processor, cause the processor to further carry out: updating, based on information contained in the second data packet, a list of routers that indicates every router in a path taken by the first data packet from a router that sent the first data packet to a present router (steps 1-7 of pages 326-330, particularly step 6 of page 328).

As to **claim 25**, Caro and RFC 2676 disclose the method of Claim 20, Caro further discloses wherein the stored sequences of instructions include instructions which, when executed by the processor, cause the processor to further carry out: updating, based on information contained in the second data packet to indicate an amount of bandwidth available (characterized by a bandwidth, lines 10-11 of page 322) on the path taken by the second data packet (bandwidth available is considered as a criterion of feasible path in algorithm

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specified in steps 1-7 of pages 326-330, which includes routing based on bandwidth).

Response to Amendments/Remarks

8. Applicant's arguments and all other documents filed on 9/2/2007 with respect to the rejection(s) of claim(s) 9-17 under 35 U.S.C. 102(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of ***

9. Applicant's arguments and all other documents filed on 9/2/2007 with respect to the rejection(s) of claim(s) 1-8, and 18-20 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

1. For claim 1 (from line 10 of page 10 to line 14 of page 11), Applicant argues: "Teruhi fails to disclose a number of features in claim 1". More specifically,

a) "there is no disclosure in Teruhi that the delay 74 is a time that a control packet a (RTCP-SR packet) takes to travel to the destination node";

b) the delay 74 is disclosed in Teruhi is a average time that data packets of a stream (RTP packets) travel from the source node to the destination node."; and

c) in RFC 2676 "There is no disclosure in RFC 2676 that time information for the first data packet over a particular path that consists of links between neighboring routers is carried back by a second data packet" (line 7-9 of page 11),

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In response:

a) RTCP-SR packet is a Real Time Control Packet. 74 DLSR field of RTCP-SR packet by definition is "DELAY SINCE LAST SR". Therefore, when RTCP-SR reaches destination, DLSR is a time to take a packet to travel to the destination node;

b) as mentioned in a) above, 74 DLSR is a time that data packets of a stream (RTP packets) travel from the source node to the destination node, but not an average time;

c) As acknowledged by Applicant that "RFC 2676 is a proposed extension to OSPF, under this proposed extension, link bandwidth and link propagation delay information between two neighboring routers may be exchanged" (line 3-5 of page 11); By taking consideration of link propagation delay, OSPF can be used to find the path with shortest link propagation delay between two routers, then in combination with sending a first data packet (RTCP-SR) from sending router to the destination router along the path and second data packet (RTCP-RR) from destination router to the sending router as taught by Teruhi, they cover everything limitation of claim 1.

10. Regarding claims 2-8 and 18-20, Applicant request to traverse the rejections since they are depend from claim 1.

In response the request is declined since Examiner maintains the rejection to claim 1 as explained above.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianye Wu whose telephone number is (571)270-1665. The examiner can normally be reached on Monday to Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianye Wu

11/02/07



KWANG BIN YAO
SUPERVISORY PATENT EXAMINER

